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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,830	04/16/2001	Barry Simpson	GRAPRI.001A	5528
20995	7590	06/03/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			FERNSTROM, KURT	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3714	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,830

Applicant(s)

SIMPSON ET AL.

Examiner

Kurt Fernstrom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3-10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/13/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 7, 8, 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites that the optics system folds the computer display image two times. This feature does not appear to be described in the specification. Also, there is no description in the specification of an "infinity optics display system" as recited in claims 7 and 12. In claim 13, there is no mention in the specification of a digital projector which configures a plurality of interactive displays with bitmaps.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 7, 8, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, it is not clear how the optics

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system operates to fold the display image two times. With respect to claims 7 and 12, the phrase "infinity optics display system" is indefinite, as the meaning of the terminology is not defined in the specification. In claim 8, the phrase "the immersive simulated experience" lacks antecedent basis. In claim 13, it is not clear how the digital projector operates to configure displays with bitmaps, as discussed above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Shiraishi. Shiraishi discloses an apparatus comprising a display system and an interactive

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computer system comprising an enclosed cockpit in a vehicle, and an interface for providing communication between the user and the computer system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris. Morris discloses in the Figures and in column 3, line 30 to column 4, line 50 of the specification a simulator comprising a computer, a projector 109 mounted below the eyes of a user, an optics system having a plurality of mirrors, a rear projection screen 105 mounted below the eyes of the viewer. Morris further discloses in Figure 2C and in column 5, lines 38-47 a spherical mirror which reflect the screen image onto the eyes of the user. While Morris does not explicitly disclose a race car simulator, such is an obvious variation on the disclosed embodiments.

Claims 6-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi in view of Morris. Shiraishi discloses all of the limitations of claims 6 and 9 with the exception of the dimensional sound system. However, such sound systems are well known in the art, as disclosed for example by Morris in column 5, line 62 to column 6, line 10 of the specification. It would have been obvious to modify the device of Shiraishi by providing a dimensional sound system for the purpose of providing a

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more realistic simulation. With respect to claim 7, Morris discloses in column 3, lines 31-44 that the cockpit comprises a covered frame. It would have been obvious to modify the device of Shiraishi by providing a covered frame for the purpose of providing a more stable apparatus. With respect to claim 8, the cockpits of Shiraishi and Morris are totally enclosed. With respect to claim 12, the displays are unaffected by ambient light, as each cockpit is enclosed.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi in view of Lechner. Shiraishi discloses all of the limitations of the claim with the exception of the plurality of displays. However, this feature is well known in the art, as disclosed for example by Lechner in Figures 1 and 4 and in the specification. It would have been obvious to modify the device of Shiraishi by providing a plurality of displays for the purpose of providing a more detailed simulation.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi in view of Battersby. Shiraishi discloses all of the limitations of the claim with the exception of the digital projector. However, this feature is well known in the art, as disclosed for example by Battersby in column 15, lines 8-23 of the specification. It would have been obvious to modify the device of Shiraishi by providing a plurality of displays for the purpose of providing a more detailed simulation.

Allowable Subject Matter

Claims 1 and 2 are allowed.

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The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to disclose or suggest each of the claimed limitations. In particular, there is no suggestion of a nixed hood having a third mirror attached to its underside, as recited in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lagace, Beal, Tomita, Bunker, Kosydar, Hawkins, Tagge, Ligon, Meader, Hayashigawa, Kurosawa, Christopher and Hart disclose various simulation devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Fernstrom whose telephone number is (571) 272-4422. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Harrison can be reached on (571) 272-4449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KF
May 31, 2005

KURT FERNSTROM
PRIMARY EXAMINER